CLAIMS

1. A storage unit for storing elongated products (A), such as cardboard tubes or the like, comprising at least two flexible members (55), equipped with supports (57) for said products, extending and moving along respective parallel paths and defined by a plurality of driving wheels (59, 63), characterized in that:

- said supports (57) project laterally from the corresponding flexible member;
- and in each of said paths in proximity to at least one driving wheel a transfer member (71) is positioned, which receives said products from the supports located on a branch (55A) of the respective flexible member upstream of said driving wheel and transfers them to the supports located on a branch (55B) of said flexible member downstream of said driving wheel with respect to the direction of feed of the flexible members along the respective paths, so that the products follow a trajectory that by-passes said driving wheel.

2. Storage unit as claimed in claim 1, characterized in that said flexible members are continuous and extend along closed paths.

3. Storage unit as claimed in claim 1 or 2, characterized in that each of said supports has two opposed resting surfaces (57V) to receive and hold said products on one or other of two sides of the support.

4. Storage unit as claimed in claim 1, 2 or 3, characterized in that said supports all project from the same side of the respective flexible component (55).

5. Storage unit as claimed in one or more of the previous claims, characterized in that said supports extend at least partially approximately according to a plane parallel to the plane on which the flexible member lies.

6. Storage unit as claimed in claim 5, characterized in that said supports project from the relative flexible member in a direction so that they are orientated radially towards the axle of the driving wheel or wheels with which said transfer members are associated.

7. Storage unit as claimed in one or more of the previous claims, characterized in that said transfer member comprises a transfer

surface (71A) intersecting the trajectory of the supports (57) carried by branches upstream and downstream of said at least one driving wheel, and inclined from the top downwards and from the branch upstream towards the branch downstream to cause transfer of said products through gravity, said paths extending along planes that lie substantially vertically.

8. Storage unit as claimed in one or more of the previous claims, characterized in that each of said closed paths is defined by at least a first and by a second series of driving wheels with fixed axle (59A, 59B), and by a first and by a second series of driving wheels with moving axle (63A, 63B) carried by a moving unit (65) between the first and the second series of driving wheels with fixed axle, and in that a respective transfer member (71), carried by said moving unit, is associated with each of said driving wheels of said first series of driving wheels with moving axis.

9. Storage unit as claimed in claim 8, characterized in that each transfer member (71) transfers the products from one branch to the other of the flexible member, tangent to the driving wheel with moving axle (63A) with which said transfer member is associated.

10. Storage unit as claimed in claim 8 or 9, characterized in that the supports are mounted projectingly on the respective flexible member so that in the area where the flexible member is driven around the wheels with moving axis they are oriented radially towards the axle of said wheels.

11. Storage unit as claimed in claim 8, 9 or 10, characterized in that each wheel of the first series of driving wheels with moving axle is coaxial to a corresponding wheel of the second series of driving wheels with moving axle.

12. Storage unit as claimed in one or more of the previous claims, characterized in that said transfer member is adjustable in position in respect of the driving wheel with which it is associated.

13. Storage unit as claimed in one or more of the previous claims, characterized in that said supports are constituted by laminar components rigidly secured to the respective flexible member.

14. Storage unit as claimed in claim 13, characterized in that each of said supports has an end (57Z) secured to the respective flexible

member and a portion forming resting surfaces for said product, the support being bent between said end and said resting surfaces to distance the resting surfaces from the plane on which the respective flexible member lies.

15. Storage unit as claimed in one or more of the previous claims, characterized in that said flexible members are constituted by chains.

16. Storage unit as claimed in claim 15, characterized in that each of said supports is rigidly secured to a respective link of the flexible member.

17. Storage unit as claimed in at least claim 10, characterized in that pairs of wheels with moving axles coaxial with each other are supported by a single hub (73), mounted rotatingly on a shaft (75) carried by said moving unit (65), and in that said hub has, in an axially intermediate position between the two wheels supported on it, an annular groove (79).

18. Storage unit as claimed in one or more of claims 8 to 11, characterized in that the driving wheels with moving axle have a larger radius than the driving wheels with fixed axle.

19. Storage unit as claimed in one or more of the previous claims, characterized in that a section bar (61) to guide and hold the products resting on said support extends around at least some of said driving wheels.

20. Storage unit as claimed in one or more of the previous claims, characterized in that said flexible members move along the respective path always in the same direction, transferring the products from a loading station (81) to an unloading station (83), the supports located along a portion of the path between the loading station and the unloading station being loaded with said products, and the supports located along the path from the unloading station to the loading station being empty.

21. Storage unit as claimed in one or more of the previous claims, characterized in that at least one guiding sliding block (201) is disposed between at least two parallel branches of each of said flexible members, in contact with said two branches.

22. Storage unit as claimed in claim 21, characterized in that said sliding block is disposed in the vicinity of one or more driving wheels, in contact with said parallel branches of the respective flexible member.

23. Storage unit as claimed in claim 21 or 22, characterized in that the width of said sliding block is greater than the distance between said two parallel branches of the flexible member, said branches being slightly divaricated by said sliding block.

24. Storage unit as claimed in at least claims 8 and 21, characterized in that a respective guiding sliding block (201) is disposed at the wheels of said first and of said second series of driving wheels with fixed axle, in contact with the two branches of the flexible member in contact with the respective driving wheel with fixed axle.

25. Storage unit as claimed in at least claims 8 and 21, characterized in that said moving unit (65) carries respective guiding sliding blocks (201) disposed between parallel branches of the driving member between two adjacent driving wheels carried by said moving unit.

26. Storage unit as claimed in one or more of claims 21 to 25, characterized in that said guiding sliding blocks have sides with bevels (201A, 201B).

27. Storage unit as claimed in claim 26, characterized in that said sliding blocks have sides with parallel rectilinear portions (201C) extending between said bevels.